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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/254,525	03/08/1999	WILHELM F. MAIER	STUDIEN262-K	7147

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EXAMINER

HENDRICKSON, STUART L

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. 678,525Applicant(s) 3MExaminer RebeccaGroup Art Unit 604

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- ☒ Responsive to communication(s) filed on 6/9/03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- ☒ Claim(s) 4-8 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 4-8 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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The Brief is noted, but moot in view of the new rejections. The delay is regretted.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4-8 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for hydrogenation of certain compounds, does not reasonably provide enablement for reactions where the pore diameter is less than twice the size of the reactants. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. Specifically, it is not possible for a monomodal pore-sized membrane to have pores which are less than twice as big as the reactants used; in other words, a pore which can accommodate 2-hexyne will be more than twice as large as hydrogen.

Furthermore, there is no support for 'pressing' beyond the inherent action of atoms/molecules in the gas phase. Therefore, no special meaning is given to the term 'pressing'. Note Brief pg. 6.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4, 5 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Walter 1685759.

Walter teaches on pg. 2 reacting chemicals under pressure by causing them to flow into a membrane's pores. The reference does not teach the pore characteristics,

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however to the extent they are not possessed (and the claims support this limitation), the examiner takes Official Notice that the materials of the reference have the claimed structure, particularly in view of the teaching to dope with catalytic solutions.

Claims 4-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Haag<sup>et al.</sup> 5110478.

Haag teaches in columns 3, 5, 10 and 15 and fig. 3 reacting compounds in a membrane having a zeolite of small, uniform pores. No differences are seen in the properties or mechanisms, particularly when compared to the present specification.

Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haag et al. The teachings are noted above. The reference 'differs' in not explicitly teaching all the claimed features in one example, however using a zeolite of the claimed properties and membrane of the claimed size is an obvious expedient to perform the reactions taught, using reagents which are taught.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.



Stuart Hendrickson  
examiner Art Unit 1754